

Ilyas Alhassan

DATA SCIENTIST · AI ENGINEER

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Summary

Production-focused AI Engineer and Data Scientist who architects, ships, and owns GenAI and machine learning systems. Built platforms used by 300+ weekly users, evaluation frameworks that catch hallucinations before release, and ML solutions that reduced months-long workflows to weeks.

Experience

Bio-Techne

Minneapolis, MN

DATA SCIENTIST

May 2024 – Present

- Architected a production multi-agent retrieval system on Databricks using DSPy, Salesforce dual-index search, and an Egnyte knowledge base, with orchestration, observability, and LLM-as-judge evaluation. Cut search time from 2+ hours to under 2 minutes and achieved an 85% deflection rate across 20 technical specialists.
- Designed and shipped LULU-BOT, a LangGraph-based sales intelligence platform with circuit breaking and request coalescing, delivering account briefs, competitive intelligence, and meeting preparation. Reached 60% adoption across a 50-person sales organization and presented it at Databricks AI Days Minneapolis 2025 (300 attendees).
- Serve as company-wide GenAI technical lead and own the architecture, deployment, governance, and operations of Bio-Techne’s enterprise LLM platform, supporting 300 weekly active users and peak adoption of 1,000 employees; hired and mentored three GenAI engineering interns.
- Built a production questionnaire automation pipeline using DSPy and the Databricks Medallion Architecture, indexing 1,500 pages of documentation and reducing procurement and sales questionnaire turnaround from 1–2 weeks to hours.
- Developed an XGBoost model for antibody-pair affinity prediction, adopted platform-wide to prioritize candidates before Carterra validation, reducing campaign planning from six months to five weeks while lowering instrument time and reagent costs.

Bio-Techne

Minneapolis, MN

DATA SCIENTIST INTERN

May 2023 – May 2024

- Built and deployed a graph-based product recommendation system using DRKG embeddings, a weekly CI/CD pipeline, and a dedicated inference endpoint for Bio-Techne’s e-commerce platform, achieving a 20% click-through rate in A/B testing.
- Developed a production text classification model with over 85% precision and accuracy to route Salesforce support cases, reducing misrouted tickets by 90% across hundreds of monthly requests.

Education

M.S. Information Technology & Artificial Intelligence

Saint Paul, MN

UNIVERSITY OF ST. THOMAS

2022 – 2025

- First-author publication in Springer CCIS on educational text analytics using LDA and PyLDAvis.

M.S. Data Science

Saint Paul, MN

UNIVERSITY OF ST. THOMAS

2019 – 2021

- Awarded the Keen Scholarship for applying interdisciplinary learning to real-world problems in education.

B.S. Actuarial Science

Tamale, Ghana

UNIVERSITY FOR DEVELOPMENT STUDIES

2013 – 2017

Skills

GenAI & LLM Systems

DSPy, LangGraph, LangChain, RAG, Multi-Agent Systems, MCP, Vector Search

Evaluation & ML

LLM-as-Judge, Offline Evaluation, Faithfulness Scoring, PyTorch, Scikit-learn, XGBoost, Graph Embeddings

Data & Infrastructure

Databricks, Apache Spark, Delta Lake, Unity Catalog, MLflow, Azure, AWS, Docker

Programming

Python, SQL, R, Bash